

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

**PCT**

To:  
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## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing **15. 3. 2005-**  
(day/month/year)

Applicant's or agent's file reference <b>R04288PCT</b>	FOR FURTHER ACTION See paragraph 2 below	
International application No. <b>PCT/JP2005/001863</b>	International filing date (day/month/year) <b>02.02.2005</b>	Priority date (day/month/year) <b>09.02.2004</b>
International Patent Classification (IPC) or both national classification and IPC Int.Cl' <b>B41J 2/05</b>		
Applicant <b>RICOH COMPANY, LTD.</b>		

1. This opinion contains indications relating to the following items:

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Date of completion of this opinion <b>24.02.2005</b>	
Name and mailing address of the ISA/JP <b>Japan Patent Office</b> 3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan	Authorized officer <b>YUKIHIRO KIRIHATA</b> Telephone No. +81-3-3581-1101 Ext. 3221
<b>2P 9606</b>	

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/001863

Box No. I Basis of the opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

This opinion has been established on the basis of a translation from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

a sequence listing  
 table(s) related to the sequence listing

b. format of material

in written format  
 in computer readable form

c. time of filing/furnishing

contained in the international application as filed.  
 filed together with the international application in computer readable form.  
 furnished subsequently to this Authority for the purposes of search.

3.  In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
**PCT/JP2005/001863**

**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Claims	<u>1-12,16,18-21</u>	YES
	Claims	<u>13-15,17</u>	NO
Inventive step (IS)	Claims	<u>1-12,18-21</u>	YES
	Claims	<u>13-17</u>	NO
Industrial applicability (IA)	Claims	<u>1-21</u>	YES
	Claims		NO

**2. Citations and explanations**

D1:JP 11-170546 A(CANON KABUSHIKI-KAISHA)29.06.1999,see whole document  
& EP 0920995 B1 & US 6277294 B1

D2:JP 11-48483 A(CANON KABUSHIKI-KAISHA)23.02.1999,see whole document  
(Family:None)

**Claims 1-12,18-21**

D1 and D2 are documents defining the general state of the art which is not considered to be of particular relevance.

**Claims 13-17**

D1 discloses a liquid ejection head including a movable member which is bending initially. This movable member consists of two different layers which have different inner stress respectively. A person skilled in the art can conceive easily that the movable member engages to an upper wall of a flow path as the initial state.